

**AIR FORCE**



AD-A209 375

**HUMAN  
RESOURCES**

**PREVENTION, REDUCTION, AND MEASUREMENT OF  
COMBAT STRESS REACTIONS: A BIBLIOGRAPHY**

**Cheryl L. Batchelor**

**LOGISTICS AND HUMAN FACTORS DIVISION  
Wright-Patterson Air Force Base, Ohio 45433-6503**

**June 1989**

**Interim Paper for Period May 1986 - November 1988**

**Approved for public release; distribution is unlimited.**

**DTIC  
FLECTE  
JUN 30 1989**

**LABORATORY**

**AIR FORCE SYSTEMS COMMAND  
BROOKS AIR FORCE BASE, TEXAS 78235-5601**

89 6 19 117

# NOTICE

When Government drawings, specifications, or other data are used for any purpose other than in connection with a definitely Government-related procurement, the United States Government incurs no responsibility or any obligation whatsoever. The fact that the Government may have formulated or in any way supplied the said drawings, specifications, or other data, is not to be regarded by implication, or otherwise in any manner construed, as licensing the holder, or any other person or corporation; or as conveying any rights or permission to manufacture, use, or sell any patented invention that may in any way be related thereto.

The Public Affairs Office has reviewed this paper, and it is releasable to the National Technical Information Service, where it will be available to the general public, including foreign nationals.

This paper has been reviewed and is approved for publication.

BERTRAM W. CREAM, Technical Director  
Logistics and Human Factors Division

DONALD C. TETMEYER, Colonel, USAF  
Chief, Logistics and Human Factors Division

## REPORT DOCUMENTATION PAGE

Form Approved  
OMB No. 0704-0188

## 1a. REPORT SECURITY CLASSIFICATION

Unclassified

## 1b. RESTRICTIVE MARKINGS

## 2a. SECURITY CLASSIFICATION AUTHORITY

## 3. DISTRIBUTION/AVAILABILITY OF REPORT

Approved for public release; distribution is unlimited.

## 2b. DECLASSIFICATION/DOWNGRADING SCHEDULE

## 4. PERFORMING ORGANIZATION REPORT NUMBER(S)

AFHRL-TP-88-61

## 5. MONITORING ORGANIZATION REPORT NUMBER(S)

## 6a. NAME OF PERFORMING ORGANIZATION

Logistics and Human Factors Division

6b. OFFICE SYMBOL  
(If applicable)

AFHRL/LRL

## 7a. NAME OF MONITORING ORGANIZATION

## 6c. ADDRESS (City, State, and ZIP Code)

Air Force Human Resources Laboratory  
Wright-Patterson Air Force Base, Ohio 45433-6503

## 7b. ADDRESS (City, State, and ZIP Code)

8a. NAME OF FUNDING/SPONSORING  
ORGANIZATION

Air Force Human Resources Laboratory

8b. OFFICE SYMBOL  
(If applicable)

HQ AFHRL

## 9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER

## 8c. ADDRESS (City, State, and ZIP Code)

Brooks Air Force Base, Texas 78235-5601

## 10. SOURCE OF FUNDING NUMBERS

PROGRAM  
ELEMENT NO.  
62205PROJECT  
NO.  
1710TASK  
NO.  
00WORK UNIT  
ACCESSION NO.  
34

## 11. TITLE (Include Security Classification)

Prevention, Reduction, and Measurement of Combat Stress Reactions: A Bibliography

## 12. PERSONAL AUTHOR(S)

Batchelor, C.L.

## 13a. TYPE OF REPORT

Interim

## 13b. TIME COVERED

FROM May 86 TO Nov 88

## 14. DATE OF REPORT (Year, Month, Day)

June 1989

## 15. PAGE COUNT

18

## 16. SUPPLEMENTARY NOTATION

## 17. COSATI CODES

FIELD	GROUP	SUB-GROUP
05	08	
05	09	

## 18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number)

combat stress	stress prevention
maintenance	stress reduction
stress measurement	

## 19. ABSTRACT (Continue on reverse if necessary and identify by block number)

This is a bibliography covering literature relevant to the prevention, reduction, and measurement of combat stress reactions. It has particular relevance to the area of aircraft maintenance in a combat environment. It covers documents produced by all the military services, as well as selected journal articles and books.

## 20. DISTRIBUTION/AVAILABILITY OF ABSTRACT

☒ UNCLASSIFIED/UNLIMITED   ☐ SAME AS RPT.   ☐ DTIC USERS

## 21. ABSTRACT SECURITY CLASSIFICATION

Unclassified

## 22a. NAME OF RESPONSIBLE INDIVIDUAL

Nancy J. Allin, Chief, STINFO Branch

## 22b. TELEPHONE (Include Area Code)

(512) 536-3877

## 22c. OFFICE SYMBOL

AFHRL/SCV

PREVENTION, REDUCTION, AND MEASUREMENT OF  
COMBAT STRESS REACTIONS: A BIBLIOGRAPHY

Cheryl L. Batchelor

LOGISTICS AND HUMAN FACTORS DIVISION  
Wright-Patterson Air Force Base, Ohio 45433-6503



Accession For	
NTIS GRA&I	<input checked="" type="checkbox"/>
DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By _____	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
A-1	

Reviewed and submitted for publication by

Robert C. Johnson  
Chief, Combat Logistics Branch

This publication is primarily a working paper. It is published solely to document work performed.

## SUMMARY

This bibliography lists references to the literature on the prevention, reduction, and measurement of combat stress and other relevant publications. This list encompasses research reports issued by all three Services and by Department of Defense contractors. It also includes reports, papers, journal articles, and books from leading experts in the area of stress.

## PREFACE

The area of combat stress and its potential impact on maintenance personnel in a combat environment has been of great interest to the Air Force Human Resources Laboratory for a number of years. That interest has recently culminated in three contractual efforts to determine the feasibility of pursuing this area of study with a more intensive research effort. Literature searching and cataloging efforts to support this work effort have produced large document files. In order to aid others conducting research on combat stress, it was determined that a bibliography tailored to the prevention, reduction, and measurement of stress should be developed.

Susan Stiller, University of Dayton Research Institute, helped to track down documents and to verify bibliographic data. Sondra Rogerson provided invaluable assistance in formatting and reviewing. Mr. Robert C. Johnson, with his unique insights into the future world of combat maintenance organizations, provided the cornerstone for this research. To all, thanks.

PREVENTION, REDUCTION, AND MEASUREMENT OF COMBAT  
STRESS REACTIONS: A BIBLIOGRAPHY

INTRODUCTION

The Combat Logistics Branch of the Air Force Human Resources Laboratory's Logistics and Human Factors Division is tasked with developing programs and methodologies which will enhance aircraft maintenance performance in peacetime as well as in combat environments. This focus on aircraft maintenance is the real lifeline of the Air Force because without effective and efficient aircraft maintenance, the routine maintenance tasks, as well as troubleshooting repairs, would not be accomplished. If routine maintenance and troubleshooting repairs were not accomplished, the required combat sortie generation rate would not be achieved. If the required combat sortie generation rate were not achieved, then United States air superiority could not be attained.

This bibliography lists source documents relevant to combat stress. This list is certainly not all-inclusive; however, the documents listed served as a basis for our current research efforts in the area of combat stress. Other areas such as management stress, stress induced by the wearing of the chemical warfare ensemble, and stresses encountered by aircrews, infantry, and artillery battalions are all important; but each one of these areas has been studied extensively. In addition, there is a great deal of overlap in the mission goals of aircrews, infantry, and artillery--protect yourself and kill the enemy. Aircraft maintenance personnel, on the other hand, are tasked to repair the aircraft and let someone else take care of the enemy. A similar situation exists for other support personnel as well. As this bibliography illustrates, there is very little information available on the peacetime stresses of aircraft maintenance personnel. Information about their reactions in combat is even more scarce. (SQU-7)

In general, there has been a great deal of interest lately--not only on the part of the Air Force but of other service branches and other countries as well--in the potential impact of combat stress on maintenance personnel and other support personnel. How do you measure combat stress? Are combat stress reactions different from other types of stress reactions? Can programs be developed to prevent severe stress reactions from occurring? New questions continue to arise. They will eventually need answers.

Such questions are the basis for most of the new programs just getting started in the area of combat stress. This bibliography provided a good deal of the groundwork required for the effort currently underway at the Air Force Human Resources Laboratory. The intent of this bibliography is to hopefully provide to future researchers a starting point for their efforts in combat stress.

## Prevention

- Bandura, A., Adams, M.E., & Beyer, J. (1977, March). Cognitive processes mediating behavioral change. Journal of Personality and Social Psychology, 35(3), 125-139.
- \*Batchelor, C.L. (1988, April). Impact of stress on combat maintenance organizations (USAF-TR-88-1). Proceedings of the 11th Annual Symposium on Psychology in the DOD. Colorado Springs, CO: USAF Academy.
- \*Chernol, B.H. (1983, September). The quiet enemy: Combat stress. Army, pp. 19-21.
- Davis, S.W. (1956). Stress in combat. Scientific American, 194(3), 31-35.
- Donnelly, C. (1982). The Soviet attitude to stress in battle. Journal of the Royal Army Medical Corps, 128, 72-78.
- Hauser, W.L. (Date Unknown). The will to fight. Combat effectiveness: Cohesion, stress and the volunteer military, 9(V104 C64 6-2), 186-211.
- Hendrix, W.H., Ovalle, M.K., & Troxler, R.G. (1985). Behavioral and psychological consequences of stress and its antecedent factors. Journal of Applied Psychology, 70.
- Hockey, R. (Ed.). (1983). Stress and fatigue in human performance. New York: John Wiley & Sons.
- Idzikowski, C., & Baddeley, A.D. (1983). Fear and dangerous environments. In R. Hockey (Ed.), Stress and fatigue in human performance. New York: John Wiley & Sons.
- \*Ingraham, L.H., & Manning, F.J. (1981, May/June). Who melts, when, and why? Field Artillery Journal, 13-16.
- \*Ingraham, L.H., & Manning, F.J. (1981, June). Cohesion: Who needs it, what is it and how do we get it to them? Military Review, 2-12.
- \*Kane, W.D., Jr. (1988, August). Stress and aircraft maintenance performance in a combat environment (AFHRL-TP-88-2, AD-198 583). Wright-Patterson AFB, OH: Logistics and Human Factors Division, Air Force Human Resources Laboratory.
- \*Kern, R., & McFann, H. (1965, December). The trumpet sounds: Can our troops be "battle-proofed"? Army Information Digest, 20, 24-27.
- Kish, F.B. (1982, April). Cohesion: The vital ingredient for successful Army units (AD-A116 719). Carlisle Barracks, PA: U. S. Army War College.
- Lamb, D.H. (1976). On the distinction between psychological and physical stressors. Psychological Reports, 38, 797-798.
- \*Lande, G. (1985, February). A preventive approach to combat psychiatry: A model program. Medical Bulletin of the U. S. Army, Europe, 42(2), 24-26.

\*Indicates those references which are directly related in some way to the impact of combat stress on support troops, to include aircraft maintenance personnel.



L'Etang, H. (1972, August). Some "actualities" of war. Military Review, 52, 87-95.

\*Lyon, C.D.F., & Black, E.R. (1987, August). Canadian Forces soldiers' perception of combat stress (Technical Note 10/87). Canadian Forces Personnel Applied Research Unit.

\*Maginnis, R.L. (1984, November/December). Battle stress: Are we prepared? Armor, pp. 35-40.

\*Mangelsdorff, A.D. (1985, July). Lessons learned and forgotten: The need for prevention and mental health interventions in disaster preparedness. Journal of Community Psychology, 239-257.

\*Riich, D.M. (1968). Prevention: The major task of military psychiatry. Psychotherapy and Psychosomatics, 16, 55-63.

Roberts, D.R., & Torkelson, E.H. (1945, April). Preparing the mind for battle. Infantry Journal, 34-36.

Selye, H. (1976). Stress in health and disease. Boston: Butterworth.

\*Squyres, T.T. (1982, August). Coping with stress: The Air Force Officers Guide (Thesis, AD-B066 904L). Maxwell AFB, AL: Air Command and Staff College.

Ursin, H. (1978). Activation, coping, and psychosomatics. In H. Ursin, E. Baade, & S. Levine (Eds.), Psychobiology of stress. New York: Academic Press.

\*Warnes, H. (1972). The traumatic syndrome. Canadian Psychiatry Association Journal, 17(5), 391-396.

### Management

Alluisi, E.A. (1982). Stress and stressors, commonplace and otherwise. In E.A. Alluisi & E.A. Fleishman (Eds.), Human performance and productivity: Stress and performance effectiveness. Hillsdale, NJ: Lawrence Erlbaum Associates.

Alluisi, E.A., & Fleishman, E.A. (Eds.). (1982). Human performance and productivity: Stress and performance effectiveness. Hillsdale, NJ: Lawrence Erlbaum Associates.

\*Artiss, K.L. (1983, October). Human behavior under stress - From combat to social psychiatry. Military Medicine, 128, 1011-1015.

Beech, H.R., Burns, L.E., & Sheffield, B.F. (1982). A behavioral approach to the management of stress. New York: John Wiley & Sons.

\*Bey, D.R., Jr. (1972, December). Change of command in combat: A locus of stress. American Journal of Psychiatry, 129(6), 698-702.

Black, E.R. (1987, April). Combat stress management: A literature summary (Technical Note 8/87). Willowdale, Ontario: Canadian Forces Personnel Applied Research Unit.

\*Bostrom, J.A. (1967). Management of combat reactions. U.S. Army Vietnam Medical Bulletin, pp. 6-8.

- \*Clemes, H. (1971, November). Relationship of military environments to stress and performance (AD-A733 933). Ft. Detrick, MD: U.S. Army Medical Research and Development Command.
- Coelho, G.V., & Irving, R.I. (1981). Coping and adaptation: An annotated bibliography and study guide. Washington, DC: National Institute of Mental Health.
- Cooper, B.L. (1987). Stress in organizations: A review of the literature (NPRDC-TR-87-30). San Diego, CA: Navy Personnel Research and Development Center.
- Cooper, C.L., & Smith, M.J. (Eds.). (1985). Job stress and blue collar work. Chichester, England: John Wiley & Sons.
- Cornell, R.W. (1963, January). Control of psychological effects in mass casualty situations. Armed Forces Chemical Journal, 17, 30-32.
- Drabek, T.E. (1968, November). Theory and methods in the study of organizational stress (AFOSR-68-1677, AD-678 929). Washington, DC: Air Force Office of Scientific Research.
- \*Fortner, W.F. (1978, April). Can the Air Force afford the price of stress? (Report No. 0775-78, AD-B030 672). Maxwell AFB, AL: Air Command and Staff College.
- \*Gabriel, R.A. (1988). No more heroes: Madness and psychiatry in war. New York: Hill & Wang.
- Garland, H.A. (1977, May). Executive emotional stress (Report No. 0840-77, AD-B019 711). Maxwell AFB, AL: Air Command and Staff College.
- \*Haliday, J.M., & McDaniel, J.C. (1986, Fall). Airmen, combat and tactical fighters. Air Force Journal of Logistics, 8-11.
- Hamilton, V., & Warburton, D.M. (Eds.). (1979). Human stress and cognition. New York: John Wiley & Sons.
- \*Hegge, F.W. (Date Unknown). The future battlefield: Human dimensions and implications for doctrine and research (WRAIR-NP-82-001, AD-A130 530). Washington, DC: Walter Reed Army Institute of Research.
- Hegge, F.W., & Tyner, C.F. (1982, December). Deployment threats to rapid deployment forces (WRAIR-NP-82-2). Washington, DC: Walter Reed Army Institute of Research.
- \*Hibler, R.J. (1984, January). Battlefield stress: Management techniques. Journal of Military Medicine, 149, 5-8.
- \*Hicks, D.A. (1966, August). Control of fear in combat. Military Review, 46, 23-29.
- \*Ingraham, L.H., & Manning, F.J. (1980, August). Psychiatric battle casualties: The missing column in a war without replacements. Military Review, 19-29.
- Kutash, I.L., Schlesinger, L.B., & Associates (Eds.). (1980). Handbook on stress and anxiety. San Francisco: Jossey-Bass.
- \*Lazarus, R.S. (1966). Psychological stress and the coping process. New York: McGraw-Hill.
- Leonova, A.V. (1985). Psychology of stress--Problems and suggested solutions. Psikhologicheskii Zhurnal, 6(3), 167-168.

- Lester, J.I. (1979, September). An annotated bibliography of DOD-funded reports concerning psychological stress: 1950-1978 (AD-A080 348). San Diego, CA: Office of Naval Research.
- Mangelsdorff, A.D., & King, J.M. (Date Unknown). Maintaining the fighting force: Cohesion and support systems (AD-A167 866). Ft. Sam Houston, TX: Health Care Studies and Clinical Investigation Activity.
- Manning, F.J. (Date Unknown). Continuous operations in Europe: Feasibility and the effects of leadership and training. Parameters, 9(3), 8-17.
- \*Marlowe, D.H. (1979, October). Cohesion, anticipated breakdown, and endurance in battle: Considerations for severe and high intensity combat. Washington, DC: Walter Reed Army Institute of Research.
- Maroshian, C.D. (1982, June). A study of human factors that affect combat effectiveness on the battlefield (Thesis, AD-A121 951). Monterey, CA: Naval Post Graduate School.
- McDonald, T.J. (1986, April). The Air Force executives guide on stress: The causes, consequences, and coping strategies (AD-A168 409). Maxwell AFB, AL: Air Command and Staff College.
- Monet, A., & Lazarus, R.S. (1985). Stress and coping: An anthology. New York: Columbia University Press.
- Motawidlo, S.J., Packard, J.S., & Manning, M.R. (1986). Occupational stress: Its causes and consequences for job performance. Journal of Applied Psychology, 71(4), 618-629.
- Office of the Surgeon General of the US Army. (1952, December). A study of combat stress - Korea 1952 (AD-A163 398). Washington, DC: Operations Research Office, Office of Naval Research, Unit No. 1, Naval Medical Research Institute.
- Poulton, E.C. (1970). Environment and human efficiency. Springfield, IL: Charles C. Thomas.
- Rath, F.H. (1980, November). The psychiatric casualty and the combat effectiveness - ineffectiveness continuum. Medical Bulletin of the U. S. Army, Europe, 37(11), 13-16.
- \*Renner, J.A. (1973, April). The changing patterns of psychiatric problems in Vietnam. Comprehensive Psychiatry, 14(2), 169-181.
- Robins, J.E., McKendry, J.M., & Hurst, P.M. (1961, October). Task-induced stress: A literature survey (AD-667 272). State College, PA: HRB-Singer, Inc.
- \*Romo, J.M., & Schneider, R.J. (1982). Stress, social support and implications for future wars. Medical Bulletin of the U. S. Army, Europe, 39(7), 12-15.
- Sarason, I.G., & Spielberger, C.D. (Eds.). (1979). Stress and anxiety. Washington, DC: Hemisphere Publishing Corporation.
- Selye, H. (1979). The stress concept and some of its implications. In V. Hamilton & D.M. Warburton (Eds.), Human stress and cognition (pp. 11-32). New York: John Wiley & Sons.
- \*Selye, H. (1980). The stress concept today. In I.L. Kutash, L.B. Schlesinger, & Associates (Eds.), Handbook on stress and anxiety (pp. 127-143). San Francisco: Jossey-Bass.

Siegel, A.I., Kopstein, F.F., Federman, P.J., Ozkaptan, H., Slifer, W.E., Hegge, F.W., & Marlowe, D.H. (1981, April). Management of stress in Army operations (ARI-RP-81-19, AD-A122 029). Washington, DC: Walter Reed Army Institute for Research.

\*Strawn, D.H. (1976, March). Can the 2nd aircraft delivery group perform its crisis management responsibilities in Europe? (Report No. 2 650-76, AD-B011 669). Maxwell AFB, AL: Air Command and Staff College.

Vineberg, R. (1965, April). Human factors in tactical nuclear combat (HUMRRO-TR-65-2, AD-463 787). Alexandria, VA: George Washington University, Human Resources Research Office (HUMRRO).

\*Vosse, G., & Froehlich, W.D. (1979). Life stress, job tension, and subjective reports of task performance effectiveness. In I.G. Sarason & C.D. Spielberger (Eds.), Stress and anxiety (pp. 199-211). Washington, DC: Hemisphere Publishing Corporation.

### Treatment

\*Braatz, G.A., Lumry, G.K., & Wright, M.S. (1971, May). The young veteran as a psychiatric patient in three eras of conflict. Military Medicine, 136, 455-457.

\*Cavenar, J.O., & Nash, J.L. (1976, September/October). The effects of combat on the normal personality: War neurosis in Vietnam returnees. Comprehensive Psychiatry, 17(5), 647-653.

Coyne, J.C., & Lazarus, R.S. (1980). Cognitive style, stress perception, and coping. In I.L. Kutash, L.B. Schlesinger, & Associates (Eds.), Handbook on stress and anxiety. San Francisco: Jossey-Bass.

\*Hoey, B. (1984, May). Wars of the mind. AIRMAN, 33-36.

\*Jones, D.R. (1986, January). U. S. Air Force combat psychiatry (USAFSAM-TR-85-83, AD-A165 011). Brooks AFB, TX: U. S. Air Force School of Aerospace Medicine.

\*Kaufman, L.W., & Belenky, G.L. (1984, January). Staying alive: Knowing what to do until the medic arrives. Military Review, 28-33.

\*King, J.M., Mangelsdorff, A.D., & O'Brien, D.E. (1985, January). Combat stress: Lessons learned from recent operational experiences (HCSCIA-85-002A-PT-A, AD-A159 815). Ft. Sam Houston, TX: Health Care Studies and Clinical Investigation.

\*Mareth, T.R., & Brooker, A.E. (1985, April). Combat stress reaction: A concept in evolution. Military Medicine, 150, 186-190.

Page, M.M., Goff, C., & Palmer, J.D. (1964, August). The psychological effects of non-nuclear weapons: A bibliography with selected abstracts (Vol. II, DD-C355-174). Norman, OK: University of Oklahoma Research Institute.

Pelletier, K.R. (1977). Mind as healer, mind as slayer. New York: Dell Publishing Company.

\*Rath, F.H. (1980, October). Psychiatric casualties in future conflicts: Estimates, management, and treatment (AD-P004 082). Proceedings of the AMEDD Psychology Symposium (pp. 164-187). Washington, DC: Walter Reed Army Medical Center.

Schneider, R.J., & Luscomb, R.L. (1984, February). Battle stress reaction and the U. S. Army. Military Medicine, 149, 66-69.

Talal, M. (1981, November). Psychological injuries in battle (USAMIIA-L-0927, AD-B068 229). Ft. Detrick, MD: U. S. Army Medical Intelligence and Information Agency.

### Measurement

Austin, F.H., Jr. (1969). A review of stress and fatigue monitoring of Naval aviators during aircraft carrier combat operations: Blood and urine biochemical studies. In P.G. Bourne (Ed.), The psychology and physiology of stress with reference to special studies of the Vietnam War (pp. 197- 218). New York: Academic Press.

\*Baddeley, A.D. (1972). Selective attention and performance in dangerous environments. British Journal of Psychology, 63(4), 537-546.

Beebe, G.W. (1958, April). Variation in psychological tolerance to ground combat in World War II (AD-A210 106). Washington, DC: Office of the Surgeon General, National Academy of Science.

\*Berkum, M.M. (1964). Performance decrement under psychological stress. Human Factors, 6, 21-30.

Bourne, P.G. (Ed.). (1969). The psychology and physiology of stress with reference to special studies of the Vietnam War. New York: Academic Press.

Breznitz, S. (1967). Incubation of threat: Duration of anticipation and false alarm as determinants of the fear reaction to an unavoidable frightening event. Journal of Experimental Research in Personality, 2, 173-179.

Bunner, R.K. (1982, September). Development of the life events survey as a measuring instrument for stress research (AFIT-LSSR-34-82, AD-A123 131). Wright-Patterson AFB, OH: Air Force Institute of Technology.

Caldwell, J.M., Ranson, S.W., & Sacks, J.G. (1951, April). Group panic and other mass disruptive reactions. U. S. Armed Forces Medical Journal, 2(4), 541-567.

Chisholm, R.F., Kasl, S.V., & Eskenazi, B. (1983). The nature of and predictors of job related tension in a crisis situation: Reactions of nuclear workers to the Three Mile Island accident. Academy of Management Journal, 26(3), 385-405.

Cooper, B.L., Nebeker, D.M., & Riedel, J.A. (1987, July). Incentive magnitude, job satisfaction, perceived stress and performance: Interrelationships in an organizational simulation (NPRDC-TR-87-29). San Diego, CA: Navy Personnel Research and Development Center.

\*Cowings, J.S. (1979, June). Reaction of combat service support troops under stress: The small maintenance support unit in a combat environment (Thesis, AD-B006 734). Ft. Leavenworth, KS: U.S. Army Command and General Staff College.

Eden, D. (1982, December). Critical job events, acute stress and strain: A multiple interrupted time series. Organizational Behavior and Human Performance, 30(3), 312-329.

- Ellertsen, B., Johnson, T.B., & Ursin, H. (1978). Relationship between the hormonal responses to activation and coping. In H. Ursin, E. Baade, & S. Levine (Eds.), Psychobiology of Stress. New York: Academic Press.
- Hansen, J.R., Stoa, K.F., Blix, A.S., & Ursin, H. (1978). Urinary levels of epinephrine and norepinephrine in parachutist trainees. In H. Ursin, E. Baade, & S. Levine (Eds.), Psychobiology of Stress. New York: Academic Press.
- Hogan, R., & Hogan, J.C. (1982). Subjective correlates of stress and human performance. In E.A. Alluisi & E.A. Fleishman (Eds.), Human performance and productivity: Stress and performance effectiveness. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Jamal, M. (1984, February). Job stress and job performance controversy: An empirical assessment. Organizational Behavior and Human Performance, 33(1).
- Kasl, S.V., & Cooper, C.L. (Eds.). (1987). Stress and health: Issues in research methodology. Chichester, England: John Wiley & Sons.
- Krahenbuhl, G.S., & Harris, J. (1984, March). Biochemical measurements of the human stress response (AFHRL-TR-83-40, AD-A139 381). Williams AFB, AZ: Operations Training Division, Air Force Human Resources Laboratory.
- \*LeBlanc, N.C. (1977, March). The measurement of job stress on an operational unit of the military (AD-A070 968). Wichita, KS: Wichita State University Center for Human Appraisal for Air Force Office of Scientific Research.
- Levine, S. (1978). Cortisol changes following repeated experiences with parachute training. In H. Ursin, E. Baade, & S. Levine (Eds.), Psychobiology of stress. New York: Academic Press.
- Lofgren, S.T. (1982, September). Combinations of individual and organizational variables and their relationship to stress and coronary heart disease risk factors (AFTT-LSSR-5-82, AD-A123 050). Wright-Patterson AFB, OH: Air Force Institute of Technology.
- Lomov, B.F. (Date Unknown). Human reactions to stress in specific situations. Springfield, VA: Joint Publishers Research Service. Reproduced by Clearinghouse for Federal Scientific and Technical Information.
- Mackay, C., Cox, T., Burrows, G., & Lazzarini, T. (1978). An inventory for the measurement of self-reported stress and arousal. British Journal of Social Clinical Psychology, 17, 283-284.
- Malkoff, D.B. (1984, February). Biotechnology predictors of physical security personnel performance: Cerebral potential measures related to stress (NPRDC-TR-84-23, AD-A139 528). San Diego, CA: Navy Personnel Research and Development Center.
- Mangelsdorff, A.D., King, J.M., & O'Brien, D.E. (1985). Battle stress survey. Ft. Sam Houston, TX: Health Care Studies and Clinical Investigation Activity.
- Margolin, S., Kubie, L.S., Kanzer, M., & Stone, L. (1943, April). Acute emotional disturbances in torpedoed seamen of the merchant marine who are continuing at sea. War Medicine, 3, 393-408.
- Martin, W.H., & Simard, L.C. (1982, October). Stress and coronary heart disease in organizational, extraorganizational, and individual environments (AFIT-LSSR-8-82, AD-A123 725). Wright-Patterson AFB, OH: Air Force Institute of Technology.

- \*Milgram, N. (Ed.). (1986). Stress and coping in time of war. New York: Brunner/Mazel.
- Mountcastle, V.B. (Ed.). (1974). Medical physiology (13th ed.). St Louis: The C.V. Mosby Company.
- Mullins, L.F., & Lukas, J.H. (1987, September). Brain potentials and personality: A new look at stress susceptibility (Technical Memorandum pp. 20-87). Aberdeen Proving Ground, MD: U. S. Army Human Engineering Laboratory.
- Nugent, W.A. (1983, November). Biotechnology predictors of physical security personnel performance: Vol II. Survey of experimental procedures to assess performance under stress (NPRDC Special Report 84-9). San Diego, CA: Navy Personnel Research and Development Center.
- Price, H.H. (1984). The Falklands: Rate of British psychiatric combat casualties compared to recent American wars. Journal of Army Medical Corps, 430, 109-113.
- Robinson, E. (1983, June). Biotechnology predictors of physical security personnel performance: I. A review of the stress literature related to performance (NPRDC-TN-83-9). San Diego, CA: Navy Personnel Research and Development Center.
- \*Villalado, A., & Tarno, R.L. (1984, March). Measuring the performance of EOD equipment and operators under stress (NAVEDDTECHCE-TR-270, AD-B083 850L). Indian Head, MD: Naval Explosive Ordnance Disposal Technology Center.
- Wallen, V. (1969). Background characteristics, attitudes, and self-concepts of Air Force psychiatric casualties from Southeast Asia. In P.G. Bourne (Ed.), The psychology and physiology of stress with reference to special studies of the Vietnam War (pp. 167-196). New York: Academic Press.
- Welford, A.T. (1973). Stress and performance. Ergonomics, 16(5), 567-580.
- Wilkins, W.L. (1982). Psychophysiological correlates of stress and human performance. In E.A. Alluisi & E.A. Fleishman (Eds.), Human performance and productivity: Stress and performance effectiveness. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Wilson, G.F., Yates, R.E., & Palmer, R. (Date Unknown). Diazepam and its effects on psychophysiological measures of performance (AFAMRL-TR-85-036, AD-A168 750). Wright-Patterson AFB, OH: Air Force Armstrong Medical Research Laboratory.

### Training

- Abraham, L. (1982). Training for battleshock. Journal of the Royal Army Medical Corps, 128, 18-27.
- Druckman, D., & Swets, J.A. (Eds.). (1988). Enhancing human performance. Washington, DC: National Academy Press.
- Fowler, J.G. (1979, December). Combat cohesion in Vietnam. Military Review, 59(12), 22-32.
- Thompson, L.J. (1973). Early development, personnel, and education and training. In A.J. Glass, (Ed.), Neuropsychiatry in World War II: Vol. 2. Overseas theater (pp. 189-218).

## Models

- Bhagat, R.S. (1983, October). Effects of stressful life events on individual performance effectiveness and work adjustment processes within organizational settings: A research model. Academy of Management Review, 8(4), 660-671.
- \*Kern, R.P. (1986, June). A conceptual model of behavior under stress, with implications for combat training (HUMRRO-TR-66-12, AD-637-312). Washington, DC: George Washington University, Human Resources Research Office (HUMRRO).
- \*Klein, G.A., & John, P.G. (1986, August). Effects of stress on maintenance performance (AFHRL-TP-85-58, AD-B104 494L). Wright-Patterson AFB, OH: Logistics and Human Factors Division, Air Force Human Resources Laboratory.
- \*Lazarus, R.S. (1966). Psychological stress and the coping process. New York: McGraw-Hill.
- Levine, S., Weinberg, J., & Ursin, H. (1978). Definition of the coping process and statement of the problem. In H. Ursin, E. Baade, & S. Levine (Eds.), Psychobiology of stress. New York: Academic Press.
- Levin, S.G. (1966, July). Mathematical models for prediction of neuropsychiatric and other non-battle casualties in high intensity combat (BRL-CR-556, AD-A171 283). Aberdeen Proving Ground, MD: U. S. Army Ballistic Research Laboratory.
- Sanders, A.F. (1983). Towards a model of stress and human performance. Acta Psychologica, 53, 61-97.
- \*Taynor, J., Klein, G.A., & Batchelor, C.L. (1988). Prediction model for estimating performance impacts of maintenance stress (AFHRL-TP-88-5, AD-A196 798). Wright-Patterson AFB, OH: Logistics and Human Factors Division, Air Force Human Resources Laboratory.

## Israeli Studies

- \*Belenky, G.L., Tyner, C.F., & Sodetz, F.J. (1983). Israeli battle shock casualties: 1973 and 1982 (WRAIR-MP-83-004, AD-133 359). Washington, DC: Walter Reed Army Institute of Research.
- \*Breznitz, S. (Ed). (1983). Stress in Israel. New York: Van Nostrand Reinhold.
- \*Miller, J.A. (Date Unknown). Combat stress reactions occurring in the Israeli Defense Force during the Lebanon conflict of 1982 (AD-P003 995). Ft. Sam Houston, TX: Army Health Services Command.
- \*Rock, S.K., & Schneider, R.J. (1984, January). Battle stress reactions and the Israeli experience in Lebanon: A brief summary. Medical Bulletin.

## Chemical Warfare

- Barnard, V.W. (Coordinator). (Date unknown). Psychological consequences of chemical and biological weapons (pp. 121-127). New York: Division of Community and Social Psychiatry, Columbia University, Annex 6.



\*Brooks, F.R., Ebner, D.G., Xenakis, S.W., & Balson, P.M. (1983, March). Psychological reactions during chemical warfare training. Military Medicine, 148, 232-235.

Cadigan, F.C., Jr. (1982). Battleshock - The chemical dimension. Journal of the Royal Army Medical Corps, 128, 89-92.